**EXERCISE AFTER ACTION REPORT**
**EMERGENCY MANAGEMENT EXERCISE**
**Select Agent Plan Tabletop Drill**
**November 24, 2009**

## Exercise Summary

LBNL conducted the annual Select Agent Plan Tabletop Drill on Tuesday, November 24, 2009. The purpose of the drill was to simulate incidents involving safety, security, and emergency response in the select agent laboratory. This tabletop is a requirement of the DOE and CDC/USDA.

The following people participated in the tabletop drill:

Berkeley Site Office – Julie Henderson
Berkeley Site Office – Kevin Hartnett
Emergency Services – Sara Wynne
LBNL Fire Protection – Gary Piermattei
LBNL Security – Joe Reilly
Principal Investigators – Tamas Torok
Terry Hazen
Gary Anderson
Responsible Official – Bruce King, Biosafety, Biosafety Officer
Controllers – Rocky Saunders
Jan McClellan

## Findings

There were no findings or corrective action items. There were no recommendations for improvement.

## Exercise Scenarios

**Scenario #1:**
An authorized user of the select agent *Yersinia pestis* obtains a frozen stock isolate from the -80ºC freezer and places it into the biosafety cabinet in the select agent laboratory. The individual streaks the frozen culture onto a plate of PYE medium for overnight growth and isolation. The individual started to feel queasy and realized that the illness he had been trying to fight off for a couple of days was coming on in full force. Feeling a need to throw up, he quickly closed up the plate after streaking the bacteria, closed the frozen vial, removed the outer pair of gloves and exited the biosafety cabinet. After removing the rest of the PPE and exiting the laboratory, the researcher is sick in the lavatory, washes up, and returns to the laboratory. Realizing that he is sick, the experiment is aborted and he secures the area. In the confusion, the person puts the streaked plate of *Y. pestis*, unsecured and unlabeled as *Y. pestis*, on the open laboratory bench. After a week of recovering from the flu at home, the researcher returns to the laboratory to find the mistakenly placed plate of *Y. pestis* on the open bench that has grown to fill

the plate and that the lid is ajar.

- Upon returning to work, researcher would contact supervisor.
- Activate biosafety and security emergency contact persons listed in the select agent plan and LBNL incident notification system. These people would initiate and document an investigation of the incident and determine needed actions. Key issues include: agent access and security, potential for personnel exposure, and incident notifications.
- Secure room. Review room access and cameras for the past week. Determine if agent access was compromised and potential for agent contamination.
- Review and decide if there was an exposure risk and potential cause of illness. Include LBNL Health Services in the assessment.
- Check for contamination of area and decon.
- Immediately notify CDC Select Agent Program, DOE Berkeley Site Office (BSO), and LBNL management of a potential incident, and follow-up with interim and final reports as needed.

No corrective action items are required as a result of this scenario.

**Scenario #2:**
A researcher is isolating DNA from a pathogenic isolate of *Y. pestis* with full protection in the biosafety cabinet. A 5.8 earthquake occurs in the middle of the process and shakes the laboratory for a full 40 seconds with a few minor objects falling from benches and shelves. The researcher ducked and covered under the biosafety cabinet. The individual is relieved to find that there was no spill in the biosafety cabinet upon returning to the top of the cabinet. He removes the outer gloves into the cabinet and puts on an additional pair, fearing there may be contamination on the gloves the researcher was using while extracting DNA. The individual proceeds to bleach and decontaminate the area under the biosafety cabinet where there may have been accidental contamination. While decontaminating the order is given to immediately vacate the building and the researcher is told by an authorized individual that they must vacate the laboratory immediately. The power is cut off and there is no ventilation in the biosafety cabinet with open cultures of the bacteria.

- If evacuated, staff will discuss with building emergency response staff if there is any need to re-enter the building to ensure agents are placed in a more secure status.
- Staff will also notify the emergency contacts in accordance with the Biosafety, Security and Incident Response Plan for Select Agents as to the conditions of the laboratory and that they are leaving the laboratory.
- Staff will also document the incident.
- Responsible Official, and emergency contact persons listed in the Biosafety, Security and Incident Response Plan for Select Agents, will assess the scenario that occurred and determine need to notify CDC Select Agent Program, DOE BSO, and LBNL management.

No corrective action items are required as a result of this scenario.

## Exercise Objectives

| Principal Investigators | | | |
|---|---|---|---|
| Principal Investigators were assigned and evaluated against 3 Exercise Objectives. They met 3 of the assigned objectives and failed to meet 0. | | | |
| **Obj. Id.** | **Objective Statement** | **Results** | **Comments** |
| PI.1 | Walk through response to critical incidents. | Met | |
| PI.2 | Increase familiarity with the LBNL Select Agent Plan. | Met | |
| PI.3 | Define lines of communications during an incident. | Met | |

## Participant Performance Summary

| Organization | Number of Objectives | Met | Not Met | Findings | Improvement Items | Superior Performance | Noteworthy Practices | N/A | N/O |
|---|---|---|---|---|---|---|---|---|---|
| Principal Investigators | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Exercise Totals** | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**N/A = not applicable**
**N/O = not observed**

## Performance Summary

The response was evaluated against 3 exercise objectives. There were no improvement items found.

## Improvement Items

No improvement items found.

## Lessons Learned

In scenario #1, researcher should make sure to control the agent/situation and inform his supervisor and another select agent authorized individual that he is leaving and the status of the project being worked on at the time. The supervisor can then get any needed information and ensure that precautions were taken with select agents if necessary.

The drill provided a great opportunity for the exchange of information between the PIs, EHS and BSO. The drill also served as a reminder to provide training for Alameda County Fire Department to the hazards that they might encounter should they enter the BSL2 Laboratory.